

PROGRAMMING TIPS - Backups

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(reprinted from the ABA Bulletin)

This month's tip is more like a threat. The fact is, if last month's tip helped organize your life (remember user areas?), this month's tip may save it. This month's topic is that continuously ignored concept, **THE BACKUP**.

Many people treat backups the way most of us treat health insurance: "It will never happen to me, I'm healthy. And besides, I can't afford it." I admit, making backups is expensive. It does take a decent chunk out of your day to put all of your data onto those little floppies. But let me tell you about some of your peers who didn't.

Acme Manufacturing (the names have been changed to protect the guilty) was, and still is, in the habit of making backups fairly regularly. And this is no small task. It takes them nearly an hour to put their two megabytes of data onto seven floppies. Recently, the backup routine they had been using ceased to work correctly, giving an error message "DISK WRITE ERROR". But they continued to use it for two weeks, obviously believing that nothing would go wrong in the meantime. Enter Murphy (as in Murphy's Law?) He had a field day. Acme Manufacturing attempted to "manipulate" their file in a way they should never do, and poof! Two megabytes of critical data out the window, with no complete data backups to fall back on. So they spent several hundred dollars to have me repair it. By hand! What's more, they were down for nearly two weeks! And they were lucky.

All in all, our programming staff and I have spent around sixty hours in the past month repairing data that could have been restored much more easily had proper backups been made. But when we visit clients and ask about their backup procedures, we find that they either do not comprehend the danger of losing computer data, or are ignoring it altogether. And our warnings don't seem to penetrate. So here are a few words of threat (since warning doesn't appear to work):

Disk failures can and do happen! Sometimes frequently! And always at the most unexpected times. If this happens to you, it is highly unlikely that your data will be recoverable, if at all, without considerable expense in dollars and downtime. What's more, Al Brandli and Associates cannot be responsible for any lost data for any reason! It's similar to the photo developing industry. A lab is not responsible for lost pictures, only for replacing the film. Under certain situations (warranty, service agreement, etc.) we can be held responsible for damaged hardware and software

we supply or service, but not for your data. The solution? **MAKE BACKUPS.**

Some tips on good backup procedures:

1) Make a backup when the work you have done on your data since your last backup is greater than you would care to repeat if something catastrophic were to happen. For some people, this is twice daily (particularly you multi-user people). For others, this is weekly or less often.

2) Do not rely on one set of backup diskettes. Lightning strikes twice sometimes. Rotate two or three sets of backup diskettes. If you use three, use one set less often than the other two (say weekly instead of daily) and rotate the other two.

3) Be certain that you are backing up your data correctly and completely. If you are not sure, ask! If a backup didn't seem to work correctly (as in Acme's case), find out why and fix it before going on. Know how to restore backed up data, as well.

Most of the time, I end this column with "try it and see what happens". But this is not as appropriate this time. So, don't try it and see what happens.

DISCUSSING OUR 'NEW LOOK', AND MY 'NEW INTEREST'

by Buzz Rudow

Funny how time changes things. Five or six years ago, I represented the leading edge of technology. NASA's MSFC knew little about micros. I was able to sell services to them which were produced on the old Vector System Bs, and MSFC thought the whole idea was great. I was the guy MSFC engineers would stop in the halls to get news of the latest developments in micro hardware and software.

Then, seemingly all of a sudden, I was way behind in technical knowledge, and in equipment. Just about every person at MSFC had a computer or a terminal on their desk. Engineers and managers had an IBM XT, IBM AT, DEC 350 or DEC 380 computer, or a DEC VT-240 or DEC VT-241 terminal. Secretaries had DECIMATE computers.

It's not that I was totally left out. I had a DEC-350 and a DECIMATE tied into the system. The tie was through a 1200-baud call-in modem, however. It's slow, and the availability of access is always questionable, due to limited number of phone-line ports to the VAX, so I didn't use it much.

The point is, I didn't procure any of this equipment. MSFC supplied it so that we could perform our job. We haven't purchased any DEC's, or any IBM PC's.

One of the engineers in the office has his personal IBM at his desk. He's been pushing for MSDOS since I hired him. He's also the expert on the DEC system. Why should I bother learning it? After all, I'm the expert on the Vectors. Oh, I know enough to get on line and read my mail, and do a little Basic programming on the PRO-350, but that's about it.

This transition at the MSFC has taken place over the last two years. I didn't pay much attention to what the NASA people were doing with their equipment. I guess I just assumed they were still coming up to speed with what I'd had for years. After all, Vectors can do anything needed around the office - Right?

It was *'sort of Right'* until a series of recent occurrences. First, I got chewed out by my NASA technical officer because some presentation charts I produced were on the Vector and not on the DEC. He couldn't take a disk with him on a trip, edit the charts at another Center and re-give the presentation. Secondly, I was directed to convert a small Basic program I'd written for the PRO-350 so that it would run on the VAX, and to expand the utility of the program into a half-dozen other areas. Finally, the office staff, and my management at corporate headquarters, began pushing hard for an answer to the question "What's the Huntsville Office going to do after Space Telescope?".

All three of the occurrences made me look a little deeper into the MSFC system. While the Vectors still do anything I previously did around the office, they can't always do what the rest of the world is now doing.

For instance, when investigating the marketing opportunities subsequent to Space Telescope, I was very surprised to find out that all correspondence and data exchange for the Space Station development, both inter- and intra-center, was mandated to be in IBM-PC format. Furthermore, if you wanted to talk to these engineers, your spreadsheet had better be Lotus 1-2-3, and your data base manager better be RBASE-5000.

I was equally surprised by the system that Space Telescope is using. The engineers' and managers' micros and terminals are networked into DEC 11/785 VAXs, which are in turn networked into just about every mini or mainframe computer on the NASA Center. Communication networks tie any user into all other NASA centers, most of the prime contractors, and many universities.

Application software is impressive, including Electronic mail; project-wide action-item lists; calander maintenance; meeting arrangement; file uploading & downloading; and graphic production of schedules, charts and graphs. All of this is menu-driven so that the novice can quickly become functional. If one wishes, exit can be made from the menu system into the DEC Command Language. The programming languages of Basic, Pascal, C, Ada, and Fortran are available to the user.

OK, I was convinced. My long-term employment opportunities will be greatly enhanced if I know the IBM-PC and the DEC family. This revelation coincided with Lexisoft's release of Spellbinder Desktop Publisher. This product had obvious use in the production of this newsletter, in preparation of documentation for NASA work, and it was salable around Huntsville by DAMAN. It didn't take too much talking to convince Lynn that she couldn't sell the product unless she used and understood it. So we bought an IBM compatible and the Hewlett Packard LaserJet+.

So now I can pass away the hours playing with Desktop Publisher. I can also access the MSFC VAX (and everything that it's networked to) from the house, or the office, using a VT-240 emulation program on the MSDOS machine. It's all been great fun and very educational.

What's all this got to do with the Micropolis/Vector Graphic Users Group? It is just an explanation of where my mind is. It's a statement of position of this Vector owner. The position is: I still use the equipment, but I'm not looking into anything new for it. I'm unable to write monthly articles of my new findings, because I haven't made any. I can surely take the time to tell of things I already know, or to investigate things I don't know, if I know what is of interest to you readers.

Lynn and I have spent quite a few hours trying to figure where the Users Group is heading. She is writing an article and preparing a survey form. It will appear in next month's newsletter. Please read it, and respond to her.

INFOCOM GAME SETUPS

by David Vergin
112 Hillcrest Dr., Elma WA 98541

The setup program for ZORK1 on a Vector used row-column cursor positioning instead of column-row. You will want to make the two changes shown below and re-assemble. The corrected version shown here has been tested and works. You might also want to check the set-up files for the other Infocom games.

The specific parameters here are for the Vector. Use SVECTOR.ASM for ZORK1.COM. The listing below starts at line 50 of the ASM file. The two effected lines have (<was 23,0) in the right-hand margin.

```
TINIT:  DB 4      ;Initialize the terminal.
           ;Should position the cursor at the
           ;lower left corner of the screen.
           ;On terminals with the facility, a
           ;scrolling region should be
           ;established to include all but the
```

```

;      ;top line on the screen. Also,
;      ;clearing the screen is desirable.
;      DB 4,1BH,0,23      (<was 23,0)
;      DS 32-$(TINIT+1)
TRESET: DB 0      ;Reset the terminal at end of game.
;      ;For example, if a scrolling region
;      ;was established, reset it to include
;      ;the entire screen. Clearing the
;      ;screen is NOT desirable.
;      DS 32-$(TRESET+1)
BLINE:  DB 4      ;Begin status line.
;      ;Should move the cursor to the
;      ;upper left corner of the screen.
;      ;If at all possible, should go
;      ;into inverse video.
;      DB 1BH,0,0,14H
;      DS 32-$(BLINE+1)
ELINE:  DB 4      ;End status line.
;      ;Should move the cursor to the
;      ;lower left corner of the screen.
;      ;If status line uses inverse video,
;      ;this state should be cleared.
;      DB 1BH,0,23,14h      (<was 23,0)
;      DS 32-$(ELINE+1)
PINIT:  DB 0      ;Printer initialization.
;      ;If any setup is required prior to
;      ;using scripting.
;      DS 200H-$

```

The setup parameters end at this point. Nothing below this point should be changed for any reason.

POWER!

by Lynn Rudow

Do you have POWER!? I have POWER!.

I was thinking what I would write about this month, besides our new toy, and remembered a certain problem I'd had a week ago.

I was updating a mailing list of 10,000 using my VG with a Micropolis 8" hard disk running CP/M. I ran into some bad data - I don't know what happened. Anyway, I kept getting a bad sector error. I had a deadline to meet so I sure needed to get that bad sector fixed.

The utility program I used was POWER. For those of you that aren't familiar with POWER, you may be missing out on the best utility program I've ever seen.

POWER let me test the disk to find the bad sectors and asked if I wanted to save those sectors or try to repair them. I could have chosen to save the bad sectors - POWER would then have established a file in the directory that would not allow you to write data on those tracks. This is *nice* when you're working with a floppy disk and don't want to throw the disk away. However, I asked POWER to repair those tracks. *Sometimes* even POWER can't repair a bad sector, but it was able to repair mine.

The TEST function is only one of POWER's 55 prompted functions. It automatically numbers disk files. You can copy, erase, reclaim, rename, and type files just by selecting a number.

POWER also has a special program that lets you lock sensitive files, so that only you can access them. Without the secret password which you create and change at will, no prying eyes ever see your files. I haven't tried this program since I'm sure Buzz would find a way to look at any files I might have locked so why bother.

If you have any questions, I'd be happy to answer them, just give me a call.

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The price of POWER retails for \$169.00 but we sell it for \$145.00. POWER is available for CP/M, MS DOS, and CP/M-86.

SPELLBINDER MASS MAILING & INDIVIDUAL CORRESPONDENCE

(Reprinted from Lexisoft Dealer Notes)

When you think about software to automate your mail processing, you probably think only of bulk mailings where you process a customer list and merge the list into a form letter so that the final product looks as though it were typed especially for the addressee. But that's only half the job; your office probably spends a lot of time on individual correspondence as well. Wouldn't you like to speed things up in this department as well? Spellbinder, the Office Manager, handles both the custom letter and the mass-produced personalized mailings with ease, as well as various types in between.

MASS MAILINGS

With many word processors, you find that to do a mail merge letter you have to buy the mail merge add-on package. To sort and handle the customer list, you have to buy yet another package. To print labels three across, you either find that you can't, or that your word processor lacks proportional spacing and absolute

tabbing, so that address information won't fit on the label.

With Spellbinder, however, everything you need is *included* in the original package. It all works together and it all works right.

HANDLING OF THE CUSTOMER LIST

Use Built-in or External Database

You can handle your customer list with Spellbinder's own built-in database, or you can use an external database manager or accounting program. If you use an outside package, you process the data first with that system and then read it into Spellbinder through the mail merge program. However, you may find that Spellbinder's capabilities eliminate the need for any external database manager.

Data Selection is Easy

From your master customer list, you can create a smaller list based on criteria of your own choosing. For example, you can select customers from a certain state, a particular zip code range, or whatever category you need. In addition to the normal address information, you can also define up to 19 major categories of information by which you can identify your customers (subcategories are almost endless). You can then create different mailing lists according to category.

Data Sorting

Spellbinder will rearrange your list in order based on any field category. You can alphabetize your list by individual or company name, or arrange the list in zip code order to meet bulk mailing requirements.

Label Printing

Labels can be printed any way you chose, including multiple columns. And since Spellbinder supports both proportional printing and absolute tabbing, you can print labels that won't overrun the width of the label.

MAIL MERGE

The merging of an address list into a form letter is the heart of any good mailing package. The final product should look as though a typist had produced a personal letter, because if you convey this impression, your letters get read. Everyone reads personal letters, but few read all their form letters.

Spellbinder allows you to merge information into the body of the letter itself, not just into the inside address. When you do any merge, the inserted information is spaced correctly within the text, with no extraneous white space to betray its origin.

Customizing the Form Letter

Spellbinder lets you include a particular statement if it is appropriate for a particular letter and exclude it if it is not. The criteria for these conditional statements can be alphabetic or numeric (if numeric, they can be less than, greater than or within a range.) At the time of printing, Spellbinder compares the criteria stated in the letter to the data for the customer and decides to either print the statement or not. Such a comparison may be based on any number of data fields.

The applications of this capability are many. You might want to send out a general sales letter, but include in some the fact that your salespeople will be in a particular area on a certain date. If you know the name of the customer's spouse, you can mention him or her by name (or, if you don't know the name, leave it out altogether). You can print in one batch letters for customers who have owed you money for 30 days and for those who have owed you money for 90 days.

Interface to External Programs

Again, you can keep track of your data with Spellbinder, but if you choose to use an external database program or accounting package, Spellbinder allows you to specify the data input format so that you can handle the data from any program capable of producing a straight ASCII file.

INDIVIDUAL CORRESPONDENCE

If yours is like most offices, your day-to-day work isn't mass mailings, but the more-or-less custom letters that must be individually produced. Studies show that each letter done this way costs more than \$12 by the time it goes out the door. Spellbinder can help you reduce that cost substantially and make each letter more effective besides. Here's how.

It's Automatic

Spellbinder's correspondence program does all the little things that add up to a lot of time. It automatically sets your print format for both letter and envelope. It automatically inserts the date into the letter at the right place. If you use a referral number, it automatically finds the correct number and inserts it. Of course, all automatic features may be overridden or turned off. For example, if you enter another date, that date will be inserted; if you hit the enter key, then today's date will be indented. And you never have to type the closing.

Dynamic Address Book

Instead of having to dig through files to get an address, Spellbinder's correspondence program keeps track of your addresses for you. As soon as you type a name, Spellbinder will check your address book and then automatically fill in the letter's inside address (if the name isn't in the address book, you type it in manually, and enter the name into the address book later).

Standard Text

For years businesses have mechanized their letters by keeping a library of finely-tuned paragraphs that are known to be effective, and which can be inserted into a letter. For most businesses, such a library is surprisingly small. With Spellbinder's correspondence program, you don't have to type in and proofread each paragraph. If you want paragraph number 24 from your library, simply type "*24*" at the point you want it. Spellbinder fetches paragraph 24 and inserts it into your letter.

Even better, number 24 doesn't have to refer to a paragraph -- it can be anything from a single character up to a multi-page document. The important thing is that it has already been proofread, so that when Spellbinder inserts it, you know it is right.

Filing and Retrieval System

Keeping track of many letters in most systems is an impossible task. If you must create a file for each letter, it is usually impossible to find anything after a year of writing 10 letters a day. You may have trouble associating a file name with a particular letter, and the sheer number of file names on the screen becomes overwhelming.

But with Spellbinder, all letters written in a specific day, week or month (depending on how many letters you write) are placed in a single file. Besides this dated file, Spellbinder keeps an automatic log, which may include the date, correspondent, referral number and subject. Using this log as an index, you can quickly locate the letter you want, and then, if needed, retrieve it from the dated archive file.

The more you use Spellbinder, the more ways you'll discover of making office correspondence faster and easier.

MICROPOLIS IS DOING WELL

Most computer-related industries are having trouble selling their product, or are being forced to competitively sell it at a price that doesn't produce corporate profits. Micropolis isn't most companies. The first quarter sales for Micropolis were \$50.7 million, up 214% compared to the 1985 first quarter. Net income for the quarter was \$3.7 million, compared to a loss of \$0.4 million in 1985.

These first quarter results, being record sales and earnings, came from market acceptance of the 1320 Series 5 1.4-inch Winchester drives with up to 85 megabytes capacity, 28 milliseconds average access time, and the typically unsurpassed Micropolis quality. These drives aren't used in your normal IBM-

compatible. They are used in professional workstations and small multi-user business systems, where high capacity and performance become vitally important.

Micropolis expects the sales trend to continue as they implement cost reduction activities for the high volume production of 1320s. Continued expansion of their market is expected as customers incorporate the new 1350 Series and 1370 Series 170 megabyte drives.

LETTERS

PEACH 4 PATCHES

Buzz- Listed below is some code I inserted in all the menus of Peach 4 to show which printer is on line. This is particularly useful in multi-user arrangements where printers are shared. My problem was that I would get up for a moment, return to my desk, and expect my program to print out. But the data went to oblivion; someone had snatched my printer!

```
50901 IF (PEEK($H3))=192 THEN PRINT
TAB(50) "OUTPUT IS PRINTER #2":
RETURN
50902 IF (PEEK($H3))=128 THEN PRINT
TAB(50) "OUTPUT IS PRINTER #1":
RETURN
50903 IF (PEEK($H3))=64 THEN PRINT
TAB(50) "OUTPUT TO CRT": RETURN
50904 PRINT TAB(50) "NO OUTPUT
DEVICE": RETURN
```

Note: "RETURN" must be eliminated on line 50900.

96TPI SUBSTITUTE DRIVES

MUG members may be interested in knowing that I've substituted eight Shugart 96tpi drives for defective 100tpi Tandon drives. Other 96tpi drives will work. I'm sure. However, all disks must be re-formatted using the 96tpi drive, and then the files copied from a good 100tpi to the 96tpi before proceeding. I have experienced no problems in tracking or reading on these drives.

Ralph Westerheide, 11354 Birmingham Ct., St. Louis
MO 63138

CLASSIFIED

HELP WANTED- I need some help in PIPing between two computers, such as setting the RDR and PUN, and if a specific reference file has to be present. I wish to exchange files between the Vector and a Televideo. I set the PUN to ELD and PIPed an ASCII file to PUN

MICROPOLIS/VG USERS GROUP

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CLASSIFIED (cont.)

and it printed fine. I assume something has to be present for the RDR to function as a UR1 or UR2 file.

I also need some help in building what the Epson people call a line driver. It increases the line signals on parallel cables allowing long parallel lines. Does anyone have a reference for plans on such a device?

Ralph Westerheide, 11354 Birmingham Ct., St. Louis, MO 63138.

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FOR SALE - Vector Graphic System-B with CP/M, Memorite II & III and the Peachtree software package, \$500. Also a Qume S3, 55 cps printer for \$500. Buyer pays shipping.

Loren McNeil, (808) 242-7052.

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FREE - Sample BASIC programs from *CodeWorks* magazine, published by 80-Northwest Publishing, Inc., 3838 South Warner, Tacoma WA 98409-4698. Available by modem only, by dialing (206) 475-2356 at 300 baud, 8 bits, no parity and one stop bit.

Voice on (206) 475-2219. According to *CodeWorks*, anyone who programs in BASIC, and has an interest in problem-solving in BASIC, should give it a try.

.....
FOR SALE - Three Vector Graphic Model 3005's, with CP/M systems and 5-megabyte hard disks, in good working order. Lots of software included. Asking \$975 each.

Fred Perry, Boston Electronics Corporation, 72 Kent Street, Brookline MA 02146 - (617) 566-3821.

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WANTED - A manual for a Cromemco 2P2S I/O board. Will pay for any reproduction and shipping expenses.

David Glickman, P.O. Box 4212, Miami FL 33269.

The Classified Section of the MUG Newsletter is available to all users, free of charge. Just call or write us with a description of what hardware, software, information, etc., that you want to obtain, or dispose of.

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